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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Claussen et al. § Group Art Unit: 2176
§
Serial No.: 09/409,370 § Examiner: Bieneman, C.
§
Filed: 09/30/1999 § Atty. Docket #: AT9-99-485
§
For: Method for processing a §
document object model (DOM) §
tree using a tagbean §

5 DECLARATION UNDER 37 C.F.R. § 1.131

To the Commissioner for Patents:

Christopher Shane Claussen declares as follows:

10

1. I am an applicant for the patent application entitled
"Method for processing a document object model (DOM) tree
using a tagbean", U.S. Patent Application Serial Number
09/409,370, filed September 30, 1999, and an inventor of
15 the subject matter described and claimed therein.

2. Prior to August 18, 1999, I completed and reduced to
practice, in the United States of America, the invention
described and claimed in the above-noted application, as
20 evidenced by the following:

20

(a) I was named as an inventor on IBM Invention
Disclosure Form AUS8-1999-0727, a document of which a
copy is attached hereto as Exhibit "A", which
25 describes the invention that is described and claimed
in the subject application.

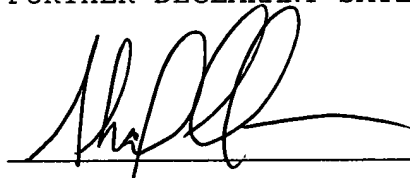
25

3. Each of the dates deleted from Exhibit "A" is prior to August 18, 1999.

4. I am named on page xviii (the "Acknowledgements" page) of the "JavaServer Pages™ Specification" Version 1.1 - Public Release", Sun Microsystems, Inc., 08/18/1999, as having contributed to the JSP 1.1. specification.

5. I further declare that all statements made herein of my own knowledge and all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful and false statements and the like so made are punishable by fine or imprisonment or both under § 1001 of Title 18 of United States Code and that such willful and false statements may jeopardize the validity of the above-referenced application and any patent issuing therefrom.

FURTHER DECLARANT SAYETH NOT.



Christopher Shane Claussen

Date:

4/8/04

EXHIBIT "A"



Disclosure AUS8-1999-0727

Created By: Matthew McClain Created On: [REDACTED]
Last Modified By: Matthew McClain Last Modified On: [REDACTED]

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Required fields are marked with the asterisk (*) and must be filled in to complete the form.

Summary

Status	Submitted
Processing Location	AUS
Functional Area	46 -SWS- TECHNOLOGY CENTER (W. W. Lawton)
Attorney/Patent Professional	Jeff LaBaw/Austin/IBM
IDT Team	Craig Becker/Austin/IBM
Submitted Date	[REDACTED]
Owning Division	SWSO
PVT Score	To calculate a PVT score, use the 'Calculate PVT' button.

Inventors with Lotus Notes IDs

Inventors: Shane Claussen/Austin/IBM, Ben ZumBrunnen/Austin/IBM

Inventor Name	Inventor Serial	Div/Dept	Manager Serial	Manager Name
Shane Claussen (SWSO)	500378	DS/ST/46	502849	VERNON SCHWARTZ/IBM
ZumBrunnen, Benjamin O. (DSO)	500380	DS/ST/46	500590	DAVID HENNING/IBM

Inventors without Lotus Notes IDs

IDT Selection

IDT Team	Attorney/Patent Professional
Craig Becker/Austin/IBM	Jeff LaBaw/Austin/IBM

Main Idea

Title of disclosure (in English):

Special Style Java TagBean 2: Text In, Text Out

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

There is a further simplification we can make for the tagbean writer: pass in an XML string.

This simplification doesn't require the writer to know anything about the DOM APIs.

If the tag requires simple token replacement, the tagbean writer will find it way too cumbersome to perform the replacement when constrained to only looking at the text in small chunks of the

attribute values and text inside of nodes.

public abstract class TextTagBean extends SimpleTagBean

```
{  
    public abstract String  
    translateText(String input);
```

```
  
    public final String  
    translateElement(Element element);
```

```
  
    public final void  
    process(Element element);  
}
```

The TextTagBean extends the SimpleTagBean class and implements the translateElement function to inherit the String -> DOM output functionality.

The TextTagBean performs as follows:

- 1 The Java TagBean handler calls SimpleTagBean.process(element).
- 2 SimpleTagBean.process hands the element off to the "overwritten" translateElement() method.
- 3 TextTagBean.translateElement() takes the element and flattens it into XML without interpreting any of the XML.
- 4 The XML is passed to the translateText method.
- 5 translateText looks at the XML string and manipulates it to produce another text (XML4JSP) representation of it and returns this to TextTagBean.translateElement().
- 6 translateElement returns the text output of translateText to the SimpleTagBean.process() method.
- 7 The text representation is parsed into a DOM.
- 8 The top node of the new DOM replaces the element that was passed into translateElement().

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

*Critical Questions (Questions 1 - 7 must be answered)

Question 1
 On what date was the invention workable? Please format the date as MM/DD/YYYY.
 (Workable means i.e. when you knew that your design will solve the problem)

Question 2
 Is there any planned or actual publication or disclosure of your invention to anyone outside IBM?
☐ Yes ☐ No
 If yes, Enter the name of each publication or patent and the date published below.
 Publication Name:
 Date Published or Issued:
 Are you aware of any publications, products or patents that relate to this invention?
☐ Yes ☐ No
 If yes, Enter the name of each publication or patent and the date published below.
 Publication Name:
 Date Published or Issued:

Question 3
 Has the subject matter of the invention or a product incorporating the invention been sold, used internally in manufacturing, announced for sale, or included in a proposal?
☐ Yes ☐ No
 If a sale, use in manufacturing, product announcement, or proposal planned?
☐ Yes ☐ No
 If Yes, identify the product if known and indicate the date or planned date of sale, announcements, or proposal and to whom the sale, announcement or proposal has been or will be made.
 Web Site:
 Date:
 To:
 If more than one, use cut and paste and append as necessary in the field provided.

Question 4
 Was the subject matter of your invention or a product incorporating your invention used in public, e.g., outside IBM or in the presence of non-IBMers?
☐ Yes ☐ No
 If yes, give a date. Please format the date as MM/DD/YYYY.

Question 5
 Have you ever discussed your invention with others not employed at IBM?
☐ Yes ☐ No
 If yes, identify individuals and date discussed. Fill in the text area with the following information: the names of the individuals; the employer; date discussed; under CDA; and CDA #.

Question 6
 Was the invention in any way, started or developed under a government contract or project?
☐ Yes ☐ No ☐ Not Sure
 If Yes, enter the contract number.

Question 7
 Was the invention made in the course of any alliance, joint development or other contractual activity?
☐ Yes ☐ No ☐ Not Sure
 If yes, enter the following: Name of Alliance, Contractor or Joint Developer.

Contract ID number
Relationship contact name
Relationship contact E-mail
Relationship contact phone

Question 8:

Have you submitted or are you aware of any related disclosure submission?

☐ Yes ☐ No

If Yes, please provide the title and docket or disclosure number below.

(If these are by the same team and may have yet to be entered)

Custom DOM tags

Scripting language needed to support multiple scripting languages in a single web page

Forming content between multiple related XML tags in a DOM

Examples of Custom Tags

Template text list

Method to get case-insensitive tag recognition from case-sensitive language

Scripting against a DOM as opposed to an output stream

How to write custom tag beans

Special Style Java TagBean 1: DOM to Text Out

Special Style Java TagBean 2: Text In Text Out

Custom DOM Tag (implemented as an XSLT)

Algorithm for processing a DOM with Custom Tags

Node Generation option

XSLT options

Access with Alternative syntax

Template generation via DOM Validation of file file

DOM Caching module

DOM Caching Transformations

Using file streams and DOM scripting

Question 9:

What type of companies do you expect to compete with inventions of this type? Check all that apply.

☒ Manufacturers of enterprise servers

☐ Manufacturers of entry servers

☐ Manufacturers of workstations

☐ Manufacturers of PCs

☐ High computer manufacturers

☐ Developers of operating systems

☒ Developers of networking software

☒ Developers of application software

☒ Integrated solution providers

☒ Service providers

☐ Other (Please specify below)

Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the eval

(The Patent Value tool can be used by you or the evaluation team to determine the potential licensing value of your invention.)

The Patent Value Tool has not yet been used to calculate a score.

Post Disclosure Text & Drawings

Enter any additional information relating to this disclosure below:

(Form Revised 12/17/97)



Disclosure AUS8-1999-0728

Created By: Matthew McClain Created On: [REDACTED]

Last Modified By: Matthew McClain Last Modified On: [REDACTED]

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Required fields are marked with the asterisk (*) and must be filled in to complete the form.

Summary

Status	Submitted
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Functional Area	48 -SWS- TECHNOLOGY CENTER (W. W. Lawton)
Attorney/Patent Professional	Jeff LaBaw/Austin/IBM
IDT Team	Craig Becker/Austin/IBM
Submitted Date	[REDACTED]
Owning Division	
PVT Score	ulate PVT button.

Inventors with Lotus

Inventors: Matthew Mc

IBM, Ben ZumBrunnen/Austin/IBM, Lin Xu/Austin/IBM

Inventor Name
> denotes primary contact

McClain, Matthew D. C.
Chausson, C. S. (S. 1996)
ZumBrunnen, Benjamin S. (S. 1996)

Manager
Serial Manager Name

374443
374443
260255
374443

Inventors without Lotus

IDT Selection

IDT Team	Attorney/Patent Professional
Craig Becker/Austin/IBM	Jeff LaBaw/Austin/IBM

Main Idea

Title of disclosure (in English)

Special Style Java TagBean 1: DOM In, Text Out

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

A good majority of the tagbeans we have written so far were implemented (or could have been implemented) by extending the SimpleTagBean class.

```
public abstract class SimpleTagBean implements TagBean
```

```
{  
    public abstract String
```

```
translateElement(Element element);
```

```
public final void  
process(Element element);  
}
```

The SimpleTagBean is an implementation of TagBean.

It performs as follows:

- 1 The Java TagBean handler calls SimpleTagBean.process(element).
- 2 SimpleTagBean.process hands the element off to the "overwritten" translateElement() method.
- 3 TranslateElement looks at the tag and produces a text (XML4JSP) representation of it and returns this to SimpleTagBean.process().
- 4 The text representation is parsed into a DOM.
- 5 The top node of the new DOM replaces the element that was passed into translateElement().

This is advantageous to the writer of the tagbean because now he doesn't have to know how to create new nodes and populate them with values. All the writer has to do is create an XML expanded form of the element passed in.

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

***Critical Questions (Questions 1 - 7 must be answered)**

Question 1:
On what date was the invention workable? Please format the date as MM/DD/YYYY
(Workable means i.e. when you know that your design will solve the problem)

Question 2:
Is there any planned or actual publication or disclosure of your invention to anyone outside IBM? ☐ Yes ☐ No
If yes, Enter the name of each publication or patent and the date published below:
XML4JSP -
August 1999
Are you aware of any public works, products or patents that relate to this invention? ☐ Yes ☐ No

If yes, enter the name of each publication or patent and the date published below:	
Publication/Patent:	
Date Published or Issued:	

Question 3 Has the subject matter of the invention or a product incorporating the invention been sold, used internally in manufacturing, announced for sale, or included in a proposal? Is a sale, use in manufacturing, product announcement, or proposal planned?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Sure
If Yes, identify the product if known and indicate the date or planned date of sale, announcement, or proposal and to whom the sale, announcement or proposal has been or will be made.	
Name: Title: Company or ISP or CSE: Address: City: State: Zip: Phone:	
If more than one, use cut and paste and append as necessary in the field provided.	

Question 4 Was the subject matter of your invention or a product incorporating your invention used in public, e.g., outside IBM or in the presence of non-IBMers?	<input type="radio"/> Yes <input type="radio"/> No
If Yes, give a date. Please format the date as MM/DD/YYYY.	

Question 5 Have you ever discussed your invention with others not employed at IBM?	<input type="radio"/> Yes <input type="radio"/> No
If yes, identify individuals and date discussed. Fill in the text area with the following information: the names of the individuals, the employer, date discussed, under CDA and CDA #.	

Question 6 Was the invention, in any way, started or developed under a government contract or project?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Sure
If Yes, enter the contract number.	

Question 7 Was the invention made in the course of any alliance, joint development or other contractual activities?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Sure
If Yes, enter the following: Name of Alliance, Contractor or Joint Developer	
Contract ID number	
Relationship contact name	
Relationship contact e-mail	
Relationship contact phone	

Question 8 Have you submitted, or are you aware of, any related disclosure submission?	<input type="radio"/> Yes <input type="radio"/> No
--	---

If YES, please provide the title and document disclosure number below:
 List of these are by the page team and may have yet to be added

Output DOM Bean
 Splitting and glue blocks to support multiple rendering languages in a single web page
 Varying content between multiple related DOM Beans in a DOM
 Libraries of Custom Tags
 Translating JSP
 Method to protect insensitive tag recognition from case sensitive programs
 Selecting against a DOM as opposed to an individual stream
 Novel way to write custom tag beans

Special Style Java TagBean 1: DOM In, Text Out
 Special Style Java TagBean 2: Text In, Text Out
 Custom DOM Tags (implemented as an XSLT)
 Algorithm for processing a DOM with Custom Tags
 Simple TagBean: text in, text out
 Code Generation Option
 XSL Mapping
 Able with Alternative syntax
 Template generator for DOM translation of HTML
 DOM Caching (includes)
 DOM Caching Considerations
 Mixing Byte stream and DOM scripting

Question 9
 What type of companies do you expect to compete with inventions of this type? Check all that apply.

<input checked="" type="checkbox"/> Manufacturers of enterprise servers
<input type="checkbox"/> Manufacturers of entry servers
<input type="checkbox"/> Manufacturers of workstations
<input type="checkbox"/> Manufacturers of PCs
<input type="checkbox"/> Non-computer manufacturers
<input type="checkbox"/> Developers of operating systems
<input checked="" type="checkbox"/> Developers of network software
<input checked="" type="checkbox"/> Developers of application software
<input checked="" type="checkbox"/> Integrated solution providers
<input checked="" type="checkbox"/> Service providers
<input type="checkbox"/> Other (Please specify below)

Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the eval

(The Patent Value tool can be used by you or the evaluation team to determine the potential licensing value of your invention.)

The Patent Value Tool has not yet been used to calculate a score.

Post Disclosure Text & Drawings

Enter any additional information relating to this disclosure below:

(Form Revised 12/17/97)